

forming a photoresist mask over the gap material layer, said photoresist mask includes photoresist dams defining an uncovered area between the photoresist dams;

depositing a magnetic upper pole tip portion of a magnetic upper pole [layer] upon the gap material layer through [a] the photoresist mask in the uncovered area;

electroplating through the same photoresist mask a selectively etchable platable metal sacrificial mask layer upon the magnetic upper [pole layer] pole tip portion;

depositing a top sacrificial mask layer on the metal sacrificial mask layer;

removing at least the photoresist dams of the photoresist mask defining the magnetic upper pole tip portion;

removing portions of the gap layer and the magnetic bottom pole layer not aligned with the magnetic upper pole tip portion [pole layer], whereby the top sacrificial mask layer and the metal sacrificial mask layer protect a portion of the magnetic upper [pole layer] pole tip portion, the gap layer and the magnetic bottom pole layer; and

chemically etching the metal sacrificial mask layer with a selective chemical etch to remove the metal sacrificial mask layer and lift off the top sacrificial mask layer.

Amend Claim 2 as follows:

2. (Amended) The method of claim 1 wherein the step of removing non-aligned portions of the magnetic bottom pole [layer] tip comprises ion milling the magnetic bottom pole [layer] tip.

Amend Claim 15 as follows:

15. (Amended) The method of claim [14] 10 wherein the step of removing non-aligned portions comprises ion milling the gap layer and the bottom magnetic pole layer following the step of stripping the photoresist mask.

Amend Claim 19 as follows:

19. (Amended) The method of claim 14 including the step of successively etching off successive sacrificial mask layers prior to etching off the first sacrificial mask layer following the step of removing non-aligned portions.

Please Add the following Claims:

31. The method of claim 10 wherein:

said magnetic bottom pole layer comprises a magnetic bottom pole tip;

the step of depositing a gap material layer upon the magnetic bottom pole layer comprises depositing a gap material layer upon at least the magnetic bottom pole tip;

said photoresist mask includes photoresist dams defining an uncovered area between the photoresist dams;

the step of electroplating through a photoresist mask a magnetic upper pole layer upon the gap comprises electroplating through the photoresist mask in the uncovered area a magnetic upper pole tip portion over the gap material layer;

the step of electroplating over the magnetic upper pole through the same photoresist mask a first sacrificial mask layer comprising a metal comprises electroplating over the magnetic upper pole tip portion through the same photoresist mask a metallic sacrificial mask;

the step of removing the photoresist mask comprises removing at least the photoresist dams defining the magnetic upper pole tip portion; and

the step of removing portions of the gap layer and the magnetic bottom pole layer not aligned with the upper pole layer comprises removing portions of the gap material layer and the magnetic bottom pole tip not aligned with the magnetic upper pole tip portion, whereby the metallic sacrificial mask protects the magnetic upper pole tip portion and portions of the underlying gap material and the magnetic bottom pole tip.

32. The method of claim 31 wherein said metallic sacrificial mask comprises a nickel-iron alloy.

33. The method of claim 32 wherein the magnetic upper pole tip portion comprises a nickel-iron alloy.

34. The method of claim 33 wherein the step of electroplating a magnetic upper pole tip portion and the step of electroplating a metallic sacrificial mask comprise electroplating an alloy comprising nickel-iron.

35. The method of claim 31 wherein the step of removing non-aligned portions comprises ion milling or dry etching the non-aligned portions.

36. The method of claim 31 wherein the step of removing non-aligned portions comprises ion milling of non-aligned portions of the magnetic bottom pole tip following the removal of non-aligned portions of the gap layer.

37. The method of claim 31 wherein the step of removing non-aligned portions comprises a step of chemically etching non-aligned portions of the gap layer.

38. The method of claim 37 wherein the step of removing non-aligned portions comprises a step of ion milling or dry etching non-aligned portions of the magnetic bottom pole tip following the step of chemically etching.

39. The method of claim 34 wherein the step of removing non-aligned portions comprises ion milling or dry etching the non-aligned portions.

40. The method of claim 34 wherein the step of removing non-aligned portions comprises ion milling of non-aligned portions of the magnetic bottom pole tip following the removal of non-aligned portions of the gap layer.

41. The method of claim 34 wherein the step of removing non-aligned portions comprises a step of chemically etching non-aligned portions of the gap layer.

42. The method of claim 41 wherein the step of removing non-aligned portions comprises a step of ion milling or dry etching non-aligned portions of the magnetic bottom pole tip following the step of chemically etching.